

# **APPLICATION PACKET**

**FOR**

# **REGISTRATION**



## **Arizona Department of Environmental Quality**

### **Air Quality Division**

**1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338**

# Table of Contents

<b>1.0</b>	<b>GENERAL INFORMATION .....</b>	<b>3</b>
1.1	Opportunities to Consult .....	3
1.2	ADEQ Timeframe for Administrative Completeness Review .....	3
1.3	ADEQ Timeframe for Processing Registrations .....	3
<b>2.0</b>	<b>IS A REGISTRATION APPROPRIATE FOR YOUR SOURCE? .....</b>	<b>4</b>
2.1	Does Your Source Require a Registration or a Permit? .....	4
2.2	Can Your Source Qualify for a Registration? .....	5
2.3	Does Your Source Require a Class II Permit? .....	6
<b>3.0</b>	<b>REGISTRATION APPLICATION PACKAGE .....</b>	<b>7</b>
3.1	Standard Registration Application Form .....	8
3.2	Standard Registration Application Components.....	9
3.3	Equipment List .....	12
3.4	Emission Source Form .....	13
<b>4.0</b>	<b>DEFINITIONS .....</b>	<b>15</b>
<b>5.0</b>	<b>APPLICATION ADMINISTRATIVE COMPLETENESS CHECKLIST .....</b>	<b>22</b>

## **SECTION 1.0 - GENERAL INFORMATION**

### **1.1 Opportunities to Consult**

To facilitate the processing of a registration application, the Department is available for consultation meetings. For complex and time-sensitive projects, it is recommended that facilities request a pre-application meeting where discussions can focus on timeline expectations and the application components necessary to process the registration. Additionally, the Department strongly recommends an application submittal meeting whereby facility personnel and their consultants can meet with Department staff and an application component review can be conducted during the meeting. The meeting will help in determining application completeness and as necessary, discussions can occur to facilitate the submittal of any missing pieces of information. Such a meeting should realize fairly substantial improvement in the timeline to process the registration.

All requests for the meetings mentioned above can be facilitated by contacting the Department at [airpermits@azdeq.gov](mailto:airpermits@azdeq.gov).

### **1.2 ADEQ Timeframe for Administrative Completeness Review**

After a registration application is received, ADEQ will determine administrative completeness within 30 calendar days.

### **1.3 ADEQ Timeframe for Processing Registration**

ADEQ will take final action on a registration application within 60 days of application receipt date for those registration applications which do not require a public hearing and within 90 days of application receipt date for those registration applications that require a public hearing.

### **1.3 Prohibited Licensing Decisions**

1. The Department shall not base a licensing decision in whole or in part on a licensing requirement or condition that is not specifically authorized by statute, rule or state tribal gaming compact. A general grant of authority in statute does not constitute a basis for imposing a licensing requirement or condition unless a rule is made pursuant to that general grant of authority that specifically authorizes the requirement or condition.
2. A.R.S. §41-1030 may be enforced in a private civil action and relief may be awarded against the state. The court may award reasonable attorney fees, damages and all fees associated with the license application to a party that prevails in an action against the state for a violation of this section.
3. A state employee may not intentionally or knowingly violate A.R.S. §41-1030. A violation of A.R.S. §41-1030 is cause for disciplinary action or dismissal pursuant to the agency's adopted personnel policy.
4. A.R.S. §41-1030 does not abrogate the immunity provided by A.R.S. §12-820.01 or A.R.S. §12-820.02.

## SECTION 2.0

### IS A REGISTRATION APPROPRIATE FOR YOUR SOURCE?

#### 2.1 Does Your Source Require a Registration or a Permit?

- A.** Listed below are four categories of sources that do not need a registration or a permit.
1. A stationary source that consists solely of a single *categorically exempt activity* plus any combination of *trivial activities*;
  2. Agricultural equipment used in normal farm operations;
  3. A source that is not subject to an NSPS or NESHAP and meets all of the criteria below:
    - a. *Maximum Capacity to Emit* of regulated air pollutants excluding *regulated minor NSR pollutants* is less than *significant* thresholds;
    - b. *Maximum Capacity to Emit* of HAPs is less than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined;
    - c. *Maximum Capacity to Emit of Regulated Minor NSR Pollutants* is less than *permitting exemption thresholds*.
  4. A source subject to any combination of NSPS and NESHAPs on the *Excluded NSPS/NESHAP List* and meets all of the criteria below:
    - a. *Maximum Capacity to Emit* of regulated air pollutants excluding *regulated minor NSR pollutants* is less than *significant* thresholds;
    - b. *Maximum Capacity to Emit* of HAPs is less than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined;
    - c. *Maximum Capacity to Emit of Regulated Minor NSR Pollutants* is less than *permitting exemption thresholds*.
- B.** If your source falls into one of the four categories listed above in Section A, it does not need a registration or a permit. However, your source will need to comply with all applicable regulations to which it is subject.
- C.** If your source does not fall into any of the four categories listed above in Section A, proceed to Section 2.2 to determine if your source could qualify for a registration.

## 2.2 Can Your Source Qualify for a Registration?

- A.** Listed below are three categories of sources that require registration.
1. A source that is subject to any NSPS and/or NESHAP other than those included in the *Excluded NSPS/NESHAP list* and meets all of the criteria below:
    - a. *Maximum Capacity to Emit* of regulated air pollutants is less than *significant* levels;
    - b. *Maximum Capacity to Emit* of HAPs is less than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined.
  2. A source that does not employ *elective limits* and meets all of the criteria below:
    - a. *Maximum Capacity to Emit* of regulated air pollutants is less than *significant* levels;
    - b. *Maximum Capacity to Emit* of HAPs is less than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined;
    - c. *Maximum Capacity to Emit* of *Regulated Minor NSR Pollutants* is greater than or equal to the *permitting exemption thresholds*.
  3. A source that employs *elective limits* and meets all of the criteria below:
    - a. *Maximum Capacity to Emit* of regulated air pollutants is less than *significant* levels;
    - b. *Maximum Capacity to Emit* of HAPs is less than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined.
- B.** If your source falls into one of the three categories listed above in Section A, it qualifies for a registration. Please proceed to Section 3, Registration Application Package.
- C.** If your source does not fall into any of the three categories listed above in Section A, proceed to Section 2.3 to determine if your source requires a Class II permit.

Note: Through the use of *elective limits or controls*, a new source or a previously permitted source can qualify for registration if the facility's *maximum capacity to emit with elective limits* is less than *significant*.

## 2.3 Does Your Source Require a Class II Permit?

- A. A source will require a Class II permit if all of the following criteria are met:
1. *Potential to Emit* of *Regulated NSR Pollutants* are less than 100 ton per year for attainment pollutants;
  2. *Potential to Emit* is less than the *Article 4 Major Source Thresholds* for nonattainment pollutants;
  3. *Maximum capacity to emit* HAPs is greater than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined and *Potential to Emit* of HAPs is less than 10 tons per year for an individual HAP and 25 tons per year for all HAPs combined.
- B. If your source satisfies the criteria above in Section A, please complete the Class II Permit Application Package.
- C. If your source does not qualify for a Class II permit, then it will require a Class I permit. You should complete the Class I Permit Application Packet.

**SECTION 3.0**  
**REGISTRATION APPLICATION PACKAGE**

**SECTION 3.1**  
**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Air Quality Division**  
**1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338**

**STANDARD REGISTRATION APPLICATION FORM**  
(As required by Chapter 2, Article 3, Arizona Administrative Code)

1. Registration to be issued to (Business license name of organization that is to receive registration):  
\_\_\_\_\_

2. Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

3. Name(s) of Owners/ Principals: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

4. Plant Site Name: \_\_\_\_\_  
Plant Site Location/ Address: \_\_\_\_\_  
City: \_\_\_\_\_ County: \_\_\_\_\_ ZIP: \_\_\_\_\_  
Indian Reservation (if applicable, which one): \_\_\_\_\_  
Latitude/ Longitude, Elevation: \_\_\_\_\_

5. Equipment Purpose: \_\_\_\_\_

6. Type of Organization:  
 Corporation     Individual Owner     Partnership     Government Entity     LLC  
 Other \_\_\_\_\_

7. Registration Application Basis:  
 New Registration     Revision of Existing Registration     Renewal of Existing Registration  
For renewal or revision, include existing registration number and expiration date: \_\_\_\_\_  
Date of Commencement of Construction/ Modification: \_\_\_\_\_

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by ADEQ as public record. I also attest that I am in compliance with the applicable requirements of the Registration and will continue to comply with such requirements and any future requirements that become effective during the life of the Registration. I will present a certification of compliance to ADEQ no less than annually and more frequently if specified by ADEQ. I further state that I will assume responsibility for the construction, modification, or operation of the facility in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any registration issued thereof.

8. Signature of Responsible Official of Organization: \_\_\_\_\_

9. Printed Name of Responsible Official / Title: \_\_\_\_\_

Date: \_\_\_\_\_ Telephone Number: \_\_\_\_\_

## **Instructions for Standard Registration Application Form**

ADEQ requires all applicants to submit a completed Standard Registration Application Form.

- Item #1:** Business license name that is to receive the registration. This business name must be registered with the Arizona Corporation Commission.
- Item #2:** Mailing address. This is the address where the registration will be mailed.
- Item #3:** Name(s) of Owner/ Principals.
- Item #4:** Plant Site Name and Location: This is the address of the current or proposed location of the facility. If the application is for a portable plant, a registration revision must be completed and returned to ADEQ each time the plant is moved.
- Item #5:** Equipment Purpose. This should be in terms of what is produced at the facility.
- Item #6:** Type of Organization. If the "other" box is checked, specify what the organization is.
- Item #7:** Registration Application Basis. Indicate what type of registration is being applied for. If the facility is already registered and is applying for a revision or renewal, then the current registration number must be included. The Date of Commencement of Construction/ Modification is the expected date that construction or modification will begin. This date need not be definite.
- Item #8:** Signature of Responsible Official. If unsure who the responsible official is for your company, refer to the definition in Section 4, Definitions.
- Item #9:** Printed Name of Responsible Official, Title of Responsible Official, and telephone number in which the responsible official can be reached.

## 3.2 - Standard Registration Application Components

### FILING INSTRUCTIONS

No application will be considered complete until the Director has determined that all information required by this registration application packet and the applicable statutes and regulations have been submitted. For registration revisions, the applicant need only supply information which directly pertains to the revision.

In addition to the information required on the standard registration application form, the applicant shall supply the following:

1. A detailed description and flow diagram of the processes at the facility.
2. A comprehensive equipment list including the type of equipment, maximum rated capacity, make, model, serial number, date of manufacture, and equipment identification (ID) number. Include all process and control equipment.
3. **Maximum capacity to emit** for each regulated air pollutant and the calculation methodology used. If the **maximum capacity to emit** for all **regulated air pollutants** is less than the significant thresholds, proceed to 4 below to determine if the source qualifies for registration.
4. **Maximum capacity to emit with elective limits** for each **regulated minor NSR pollutant** and the calculation methodology used. If the **maximum capacity to emit with elective limits** is greater than the **permitting exemption thresholds** and less than the **significant** levels, then the facility qualifies for the registration program. Listed below are **the regulated minor NSR pollutants** with associated **permitting exemption thresholds** and **significant** levels; allowed **elective limits**; and calculation methodology options.
  - a. **Regulated Minor NSR Pollutants, Permit Exemption Thresholds, and Significant Levels**

<b>Regulated Minor NSR Pollutants</b>	<b>Permitting Exemption Thresholds (tons / year)</b>	<b>Significant Levels (tons / year)</b>
NO <sub>x</sub>	20	40
SO <sub>2</sub>	20	40
CO	50	100
VOC	20	40
PM <sub>10</sub>	7.5	15
PM <sub>2.5</sub>	5	10
Lead	0.3	0.6

- b. **Allowed Elective Limits**
  - i. A limitation on the hours of operation of any process or combination of processes;
  - ii. A limitation on the production rate for any process or combination of processes;
  - iii. A requirement to operate a fabric filter for the control of PM emissions; and
  - iv. A limitation on the concentration of VOC or hazardous air pollutants in process materials.

c. **Calculation Methodologies**

Calculation methods for estimating emissions include, but are not limited to the methods listed below. Calculations should identify and account for all elective limits imposed at the facility.

- i. AP 42: <http://www3.epa.gov/ttnchie1/ap42/>
- ii. Material Balance;
- iii. Manufacturer’s Data; and
- iv. Source Testing.

5. In the case of a facility *modification*, a registration revision is required when there is an increase in *maximum capacity to emit with elective limits* that exceeds any of the thresholds listed below. The method used to determine the increase in *maximum capacity to emit with elective limits* shall be identified.

<b>Regulated Minor NSR Pollutants</b>	<b>Registration Revision Thresholds (tons / year)</b>
NO <sub>x</sub>	2.5
SO <sub>2</sub>	2.5
CO	2.5
VOC	2.5
PM <sub>10</sub>	2.5
PM <sub>2.5</sub>	2.5
Lead	0.3

- 6. All stack parameter information requested in the Emission Sources Form.
- 7. Any application component that is being identified as “confidential” shall follow the notice obligations in A.R.S. 49-432 and A.A.C. R18-2-305.



### 3.4 - EMISSION SOURCE FORM

**COMPANY NAME:** \_\_\_\_\_

Estimated potential to emit as per A.A.C. R 18-2-101(109)

Review of application and issuance of registration shall be expedited by supplying all necessary information in this Table.

REGULATED AIR POLLUTANT DATA				
Emission Point (1)		Chemical Composition of Total Stream	Regulated air pollutant	
Number	Name	Regulated air pollutant name (2)	lbs/hr (3)	tons/yr (4)

**GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL:** \_\_\_\_\_

**General Instructions:**

1. Identify each emission point with a unique number for this plant site, consistent with emission point identification used on plot plan, previous permits, and Emission Inventory Questionnaire. Include fugitive emissions. Limit emission point number to eight (8) character spaces. For each emission point use as many lines as necessary to list regulated air pollutant data. Typical emission point names are: heater, vent, boiler, tank, reactor, baghouse, fugitive, etc. Abbreviations are acceptable.
2. Components to be listed include regulated air pollutants as defined in R-18-2-101 (120). Examples of typical component names are: Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>), Sulfur Dioxide (SO<sub>2</sub>), Volatile Organic Compounds (VOC), Particulate Matter less than 10 micron size (PM<sub>10</sub>), etc. Abbreviations are acceptable.
3. Pounds per hour (#/hr) is maximum potential emission rate expected by applicant.
4. Tons per year is annual maximum potential emission expected by applicant, which takes into account process operating schedule.
5. ADEQ will need the following information to perform screen modeling for NAAQS compliance review.

**Detailed Facility Layout**

1. Location of the facility's fence line: \_\_\_\_\_
2. Location of emission points: \_\_\_\_\_
3. Location of process equipment (i.e. storage tanks, silos, conveyors, etc.), lay down areas, parking lots, haul/ maintenance roads, storage piles, etc.: \_\_\_\_\_
4. Location and dimensions of all buildings at the facility: \_\_\_\_\_

If a site plan becomes too crowded, a table listing all this information can be provided with the ID traceable on the plot.

**Emission Profiles**

1. Maximum hourly emission rates (lb/hr): \_\_\_\_\_
2. Maximum annual emission rate (tons/year): \_\_\_\_\_

**Stack Parameters**

1. Stack Parameters: \_\_\_\_\_
2. Stack Gas Exit Velocity: \_\_\_\_\_
3. Stack gas exit temperature: \_\_\_\_\_
4. UTM coordinates: \_\_\_\_\_
5. Stack inside diameter: \_\_\_\_\_
6. Stack height above ground: \_\_\_\_\_

Indicate if the stack is a non-vertical/ vertical stack with obstructed emission e.g. rain cap.

Indicate if the stack is a non-round stack; show length and width for a rectangular stack.

## SECTION 4.0 – DEFINITIONS

**Attainment area** means any area in the state that has been identified in regulations promulgated by the Administrator as being in compliance with national ambient air quality standards.

**Categorical Sources** mean the following classes of sources:

1. Coal cleaning plants with thermal dryers;
2. Kraft pulp mills;
3. Portland cement plants;
4. Primary zinc smelters;
5. Iron and steel mills;
6. Primary aluminum ore reduction plants;
7. Primary copper smelters;
8. Municipal incinerators capable of charging more than 250 tons of refuse per day;
9. Hydrofluoric, sulfuric, or nitric acid plants;
10. Petroleum refineries;
11. Lime plants;
12. Phosphate rock processing plants;
13. Coke oven batteries;
14. Sulfur recovery plants;
15. Carbon black plants using the furnace process;
16. Primary lead smelters;
17. Fuel conversion plants;
18. Sintering plants;
19. Secondary metal production plants;
20. Chemical process plants, which shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System codes 325193 or 312140;
21. Fossil-fuel boilers, combinations thereof, totaling more than 250 million Btus per hour heat input;
22. Petroleum storage and transfer units with a total storage capacity more than 300,000 barrels;
23. Taconite preprocessing plants;
24. Glass fiber processing plants;
25. Charcoal production plants;
26. Fossil-fuel-fired steam electric plants and combined cycle gas turbines of more than 250 million Btus per hour heat input

**Categorical Exempt Activities** mean:

1. Any combination of diesel-, natural gas- or gasoline fired engines with cumulative power equal to or less than 145 horsepower
2. Natural gas-fired engines with cumulative power equal to or less than 155 horsepower

3. Gasoline-fired engines with cumulative power equal to or less than 200 horsepower
4. Any of the following emergency or stand-by engines used for less than 500 hours in each calendar year, provided the permittee keeps records documenting the hours of operation of the engines:
  - a. Any combination of diesel-, natural gas- or gasoline-fired emergency engines with cumulative power equal to or less than 2,500 horsepower.
  - b. Natural gas-fired emergency engines with cumulative power equal to or less than 2,700 horsepower.
  - c. Gasoline-fired emergency engines with cumulative power equal to or less than 3,700 horsepower.
  - d. Any combination of boilers with a cumulative maximum design heat input capacity of less than 10 million Btu/hr

**Construction** means any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, which would result in a change in actual emissions.

**Elective Limits or Controls** means the owner/operator of a source that requires a registration may elect to include any of the following emission limitations in the registration, provided the registration also includes the operating, maintenance, monitoring, and recordkeeping requirements specified below for the limitation:

1. hours of operation for any process or combination of processes (requires owner/ operator to log hours operated daily)
2. production rate for any process or combination of processes (requires owner/ operator to log production rate daily)
3. fabric filter to control particulate matter emissions (requires owner/ operator to: operate and maintain the fabric filter in accordance with manufacturer's recommendations; operate the fabric filter at all times the emission unit is operated; inspect fabric filter once per month for tears or leaks and promptly repair any tears and leaks identified; and record all inspections and any maintenance activities required as a result of the inspection)
4. VOC or HAP limit on process materials (requires owner/ operator to maintain a log of the VOC or HAP concentrations in each material used during the current calendar year)

**Excluded NSPS/NESHAPS List** includes:

1. 40 CFR 60, Subpart AAA (Residential Wood Heaters)
2. 40 CFR 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines)
3. 40 CFR 60, Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines)
4. 40 CFR 61.145 (Asbestos - Standard for Demolition and Renovation)
5. 40 CFR 63, Subpart ZZZZ (Reciprocating Internal Combustion Engines)
6. 40 CFR 63, Subpart WWWW (Ethylene Oxide Sterilizers)
7. 40 CFR 63, Subpart CCCCCC (Gasoline Distribution)

8. 40 CFR 63, Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations)
9. 40 CFR 63, Subpart JJJJJJ (Industrial, Commercial, and Institutional Boilers Area Sources)
10. 112(r) (Guide to the Accidental Release Prevention Requirements)

**Insignificant Activities** mean:

1. Liquid Storage and Piping Liquid Storage and Piping
  - a. Petroleum product storage tanks containing the following substances, provided the applicant lists and identifies the contents of each tank with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such tank: diesel fuels and fuel oil in storage tanks with capacity of 40,000 gallons or less, lubricating oil, transformer oil, and used oil.
  - b. Gasoline storage tanks with capacity of 10,000 gallons or less.
  - c. Storage and piping of natural gas, butane, propane, or liquefied petroleum gas, provided the applicant lists and identifies the contents of each stationary storage vessel with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such vessel.
  - d. Piping of fuel oils, used oil and transformer oil, provided the applicant includes a system description.
  - e. Storage and handling of drums or other transportable containers where the containers are sealed during storage, and covered during loading and unloading, including containers of waste and used oil regulated under the federal Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992k. Permit applicants must provide a description of material in the containers and the approximate amount stored.
  - f. Storage tanks of any size containing exclusively soaps, detergents, waxes, greases, aqueous salt solutions, aqueous solutions of acids that are not regulated air pollutants, or aqueous caustic solutions, provided the permit applicant specifies the contents of each storage tank with a volume of 350 gallons or more.
  - g. Electrical transformer oil pumping, cleaning, filtering, drying and the re-installation of oil back into transformers.
2. Internal combustion engine-driven electrical generator sets, and internal combustion engine-driven water pumps used for less than 500 hours per calendar year for emergency replacement or standby service, provided the permittee keeps records documenting the hours of operation of this equipment.
3. Low Emitting Processes
  - a. Batch mixers with rated capacity of 5 cubic feet or less.
  - b. Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds, whose production rate is 200 tons/hour or less, and whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any nonmetallic minerals.
  - c. Powder coating operations.

- d. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
  - e. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
  - f. Plastic pipe welding.
4. Site Maintenance
- a. Housekeeping activities and associated products used for cleaning purposes, including collecting spilled and accumulated materials at the source, including operation of fixed vacuum cleaning systems specifically for such purposes.
  - b. Sanding of streets and roads to abate traffic hazards caused by ice and snow.
  - c. Street and parking lot striping.
  - d. Architectural painting and associated surface preparation for maintenance purposes at industrial or commercial facilities.
5. Sampling and Testing
- a. Noncommercial (in-house) experimental, analytical laboratory equipment which is bench scale in nature, including quality control/quality assurance laboratories supporting a stationary source and research and development laboratories.
  - b. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units.
6. Ancillary Non-Industrial Activities
- a. General office activities, such as paper shredding, copying, photographic activities, and blueprinting, but not to include incineration.
  - b. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use.
  - c. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition.
7. Miscellaneous Activities
- a. Installation and operation of potable, process and waste water observation wells, including drilling, pumping, filtering apparatus.
  - b. Transformer vents.

**Maintenance Area** means any geographic region of the United States that the EPA previously designated as a nonattainment area for one or more pollutants pursuant to the Clean Air Act Amendments of 1990, and subsequently redesignated as an attainment area subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act, as amended.

**Major Modification** is defined as follows:

1. A major modification is any physical change in or change in the method of operation of a major source that would result in both a significant emissions increase of any regulated NSR pollutant and a significant net emissions increase of that pollutant from the stationary source.
2. Any emissions increase or net emissions increase that is significant for nitrogen oxides or volatile organic compounds is significant for ozone.

**Major Source** means:

1. A major source as defined in A.A.C R18-2-401.
  - a. For purposes of determining the applicability of A.A.C. R18-2-403 through A.A.C. R18-2-405 or A.A.C. R18-2-411, major source means any stationary source that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant, except that the following thresholds shall apply in areas subject to subpart 2, subpart 3 or subpart 4 of part D, Title I of the Act:

Pollutant Emitted	Nonattainment Pollutant and Classification	Quantity Threshold (tons/year or more)
Carbon Monoxide (CO)	CO, Serious, if stationary sources contribute significantly to CO levels in the area as determined under rules issued by the Administrator	50
VOC	Ozone, Serious	50
VOC	Ozone, Severe	25
PM <sub>10</sub>	PM <sub>10</sub> , Serious	70
PM <sub>2.5</sub>	PM <sub>2.5</sub> Serious	70
PM <sub>2.5</sub> precursors identified in A.A.C. R18-2-101(124)(a)	PM <sub>2.5</sub> Serious	70
NO <sub>x</sub>	Ozone, Serious	50
NO <sub>x</sub>	Ozone, Severe	25

- b. For purposes of determining the applicability of A.A.C. R18-2-406 through A.A.C. R18-2-408 or A.A.C. R18-2-410, major source means any stationary source that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant if the source is classified as a categorical source, or 250 tons per year or more of any regulated NSR pollutant if the source is not classified as a categorical source;
- c. Any stationary source that emits, or has the potential to emit, five or more tons of lead per year;
- d. A major source that is major for VOC or nitrogen oxides shall be considered major for ozone;
- e. The fugitive emissions of a stationary source shall not be included in determining whether it is a

major source, unless the source belongs to a section 302(j) category.

2. A major source under section 112 of the Act:
  - a. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate, including fugitive emission 10 tons per year or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tons per year or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Article 11 of this Chapter. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
  - b. For radionuclides, “major source” shall have the meaning specified by the Administrator by rule.
3. A major stationary source, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tons per year or more of any air pollutant including any major source of fugitive emissions of any such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to a section 302(j) category.

**Maximum Capacity to Emit** means the maximum capacity of a stationary source to emit a pollutant excluding secondary emissions, under its physical and operational design

**Maximum Capacity to Emit with Elective Controls** means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is subject to an elective limit under R18-2-302.01.F. Maximum capacity to emit with elective limits is currently referred to as uncontrolled potential to emit.

**Minor NSR Modification** means any of the following changes that do not qualify as a major source or major modification:

1. Any physical change in or change in the method of operation of an emission unit or a stationary source that either:
  - a. Increases the potential to emit of a regulated minor NSR pollutant by an amount greater than the permitting exemption thresholds, or
  - b. Results in emissions of a regulated minor NSR pollutant not previously emitted by such emission unit or stationary source in an amount greater than the permitting exemption thresholds.
2. The following do not constitute a physical change or change in the method of operation:
  - a. A change consisting solely of the construction of, or changes to, a combination of emissions units qualifying as a categorically exempt activity.
  - b. For a stationary source that is required to obtain a Class II permit under R18-2-302 and that is subject to source-wide emissions caps under R18-2-306.01 or R18-2-306.02, a change that will not result in the violation of the existing emissions cap for that regulated minor NSR pollutant.
  - c. Replacement of an emission unit by a unit with a potential to emit regulated minor NSR pollutants that is less than or equal to the potential to emit of the existing unit, provided the replacement does

not cause an increase in emissions at other emission units at the stationary source. A unit installed under this provision is subject to any limits applicable to the unit it replaced.

- d. Routine maintenance, repair, and replacement.
  - e. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 to 825r.
  - f. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
  - g. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
  - h. Use of an alternative fuel or raw material by a stationary source that either:
    - i. The source was capable of accommodating before December 12, 1976, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of A.A.C R18-2; or
    - ii. The source is approved to use under any permit issued under 40 CFR 52.21, or under Articles 3 or 4 of A.A.C R18-2.
  - i. An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
  - j. Any change in ownership at a stationary source
  - k. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
    - i. The SIP, and
    - ii. Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
  - l. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis.
  - m. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
- 3. Construction of one or more new emissions units that have the potential to emit regulated minor NSR pollutants at an amount greater than the permitting exemption threshold.
  - 4. A change constitutes a minor NSR modification regardless of whether there will be a net decrease in total source emissions or a net increase in total source emissions that is less than the permitting exemption threshold as a result of decreases in the potential to emit of other emission units at the same stationary source.
  - 5. For purposes of this subsection:

- a. “Potential to emit” means the lower of a source’s or emission unit’s potential to emit or its allowable emissions.
- b. In determining potential to emit, the fugitive emissions of a stationary source shall not be considered unless the source belongs to a section 302(j) category.
- c. All of the roadways located at a stationary source constitute a single emissions unit

**Minor Source** means a source of air pollution which is not a major source for the purposes of Article 4 and over which the Director, acting pursuant to A.R.S. § 49-402(B), has asserted jurisdiction.

**Modification or Modify** means a physical change in or change in the method of operation of a source that increases the emissions of any regulated air pollutant emitted by such source by more than any relevant de minimis amount or which results in the emission of any regulated air pollutant not previously emitted by more than such de minimis amount. An increase in emissions at a minor source shall be determined by comparing the source’s potential to emit before and after the modification<sup>6</sup>. The following exemptions apply:

1. A physical or operational change does not include routine maintenance, repair or replacement.
2. An increase in the hours of operation or if the production rate is not considered an operational change unless such increase is prohibited under any permit condition that is legally and practically enforceable by the department.
3. A change in ownership at a source is not considered a modification.

**National Ambient Air Quality Standards (NAAQS)** means the ambient air pollutant concentration limits established by the Administrator pursuant to section 109 of the Act.

**Permitting Exemption Thresholds** means the following:

<b>Pollutant</b>	<b>Emissions Rate</b>
PM <sub>2.5</sub> (primary emissions only)	5 tons per year
PM <sub>10</sub>	7.5 tons per year
SO <sub>2</sub>	20 tons per year
NO <sub>x</sub>	20 tons per year
VOCs	20 tons per year
CO	50 tons per year
Lead	0.3 tons per year

**Potential to Emit or Potential Emission Rate** means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally and practically enforceable by the Department.

**Regulated Air Pollutant** means any of the following:

1. Any conventional air pollutant.

2. Nitrogen oxides and volatile organic compounds.
3. Any air contaminant that is subject to a standard contained in Article 9 of A.A.C. R18-2.
4. Any hazardous air pollutant as defined in Article 17 of A.A.C. R18-2.
5. Any Class I or II substance listed in section 602 of the Clean Air Act.

**Regulated NSR Pollutant** means any of the following:

1. Any pollutant for which a national ambient air quality standard has been promulgated and any pollutant identified under this subsection as a constituent or precursor to such pollutant. Precursors for purposes of NSR are the following:
  - a. Volatile organic compounds and nitrogen oxides are precursors to ozone in all areas.
  - b. Sulfur dioxide is a precursor to PM<sub>2.5</sub> in all areas.
  - c. Nitrogen oxides are precursors to PM<sub>2.5</sub> in all areas.
2. Any pollutant that is subject to any standard promulgated under Article 9 of this A.A.C R18-2.
3. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act as of July 1, 2011.
4. Notwithstanding the above three, the term regulated NSR pollutant shall not include any or all hazardous air pollutants listed under A.A.C. R18-2-1101, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act as of July 1, 2010.
5. Particulate matter emissions, PM<sub>2.5</sub> emissions, and PM<sub>10</sub> emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On and after January 1, 2011, condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for particulate matter, PM<sub>2.5</sub> and PM<sub>10</sub> in permits issued under Article 4.

**Regulated Minor NSR Pollutant** means any pollutant for which a national ambient air quality standard has been promulgated and the following precursors for such pollutants:

1. VOC and nitrogen oxides as precursors to ozone
2. Nitrogen oxides and sulfur dioxide as precursors to PM<sub>2.5</sub>

**Reasonably Available Control Technology (RACT)** means devices, systems, process modifications, work practices or other apparatus or techniques that are determined by the Director to be reasonably available taking into account:

1. The necessity of imposing the controls in order to attain and maintain a national ambient air quality standard;
2. The social, environmental, energy and economic impact of the controls;
3. Control technology in use by similar sources; and
4. The capital and operating costs and technical feasibility of the controls.

**Responsible Official** means one of the following:

1. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a

principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

- a. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
  - b. The delegation of authority to such representatives is approved in advance by the permitting authority;
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  3. For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).
  4. For affected sources:
    - a. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated thereunder are concerned; and
    - b. The designated representative for any other purposes under 40 CFR 70.

**Significant** means, in reference to a significant emissions increase, a net emissions increase or a stationary source’s potential to emit or uncontrolled potential to emit a regulated NSR pollutant:

1. A rate of emissions of conventional pollutants that would equal or exceed any of the following:

<b>Pollutant</b>	<b>Emissions Rate</b>
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
PM <sub>10</sub>	15 tpy
PM <sub>2.5</sub>	10 tpy of direct PM <sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions.
VOCs	40 tpy
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H <sub>2</sub> S)	10 tpy

Pollutant	Emissions Rate
Total reduced sulfur (including H <sub>2</sub> S)	10 tpy
Reduced sulfur compounds (including H <sub>2</sub> S)	10 tpy
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5 x 10 <sup>-6</sup> tpy
Municipal waste combustor metals (measured as particulate matter)	15 tpy
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40 tpy
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50 tpy
Any regulated NSR pollutant not specifically listed in this above	Any emission rate

2. In ozone nonattainment areas classified as serious or severe, the emission rate for nitrogen oxides or VOC determined under A.A.C. R18-2-405.
3. In a carbon monoxide nonattainment area classified as serious, a rate of emissions that would equal or exceed 50 tons per year, if the Administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.
4. Notwithstanding the emission rates listed in 1 and 2 above, for purposes of determining the applicability of A.A.C. R18-2-406, any emissions rate or any net emissions increase associated with a major source or major modification, which would be constructed within 10 kilometers of a Class I area and have an impact on the ambient air quality of such area equal to or greater than 1 µg/m<sup>3</sup> (24-hour average).

**Stationary Source** means any building, structure, facility or installation subject to regulation pursuant to A.R.S. § 49-426(A) which emits or may emit any air pollutant. “Building,” “structure,” “facility,” or “installation” means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” as described in the “Standard Industrial Classification Manual, 1987.”

**Trivial activities** means activities and emissions units, such as the following, that may be omitted from a permit or registration application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:

1. Low-Emitting Combustion
  - a. Combustion emissions from propulsion of mobile sources;
  - b. Emergency or backup electrical generators at residential locations;
  - c. Portable electrical generators that can be moved by hand from one location to another. “Moved by hand” means capable of being moved without the assistance of any motorized or non-motorized

vehicle, conveyance, or device;

2. Low- Or Non-Emitting Industrial Activities

- a. Blacksmith forges;
- b. Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, sawing, grinding, turning, routing or machining of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass, or wood;
- c. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are insignificant activities based on size or production level thresholds. Brazing, soldering, and welding equipment, and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this definition;
- d. Drop hammers or hydraulic presses for forging or metalworking;
- e. Air compressors and pneumatically operated equipment, including hand tools;
- f. Batteries and battery charging stations, except at battery manufacturing plants;
- g. Drop hammers or hydraulic presses for forging or metalworking;
- h. Equipment used exclusively to slaughter animals, not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;
- i. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
- j. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
- k. CO2 lasers used only on metals and other materials that do not emit HAP in the process;
- l. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam;
- m. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
- n. Laser trimmers using dust collection to prevent fugitive emissions;
- o. Process water filtration systems and demineralizers;
- p. Demineralized water tanks and demineralizer vents;
- q. Oxygen scavenging or de-aeration of water;
- r. Ozone generators;
- s. Steam vents and safety relief valves;
- t. Steam leaks; and
- u. Steam cleaning operations and steam sterilizers;
- v. Use of vacuum trucks and high pressure washer/cleaning equipment within the stationary source boundaries for cleanup and insource transfer of liquids and slurried solids to waste water treatment units or conveyances;
- w. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
- x. Electric motors.

3. Building and Site Maintenance Activities

- a. Plant and building maintenance and upkeep activities, including grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots, if these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and do not otherwise trigger a permit revision. Cleaning and painting activities qualify as trivial activities if they are not subject to VOC or hazardous air pollutant control requirements;
- b. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating, de-greasing, or solvent metal cleaning activities, and not otherwise triggering a permit revision;
- c. Janitorial services and consumer use of janitorial products;
- d. Landscaping activities;
- e. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
- f. Sanding of streets and roads to abate traffic hazards caused by ice and snow;
- g. Street and parking lot striping;
- h. Caulking operations which are not part of a production process.

4. Incidental, Non-Industrial Activities

- a. Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the Act;
- b. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;
- c. Tobacco smoking rooms and areas;
- d. Non-commercial food preparation;
- e. General office activities, such as paper shredding, copying, photographic activities, pencil sharpening and blueprinting, but not including incineration;
- f. Laundry activities, except for dry-cleaning and steam boilers;
- g. Bathroom and toilet vent emissions;
- h. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under subsection (144)(c) of the definition of major source in this Section and any required fugitive dust control plan or its equivalent is submitted with the application;
- i. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use;
- j. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition;
- k. Circuit breakers;
- l. Adhesive use which is not related to production.

5. Storage, Piping and Packaging

- a. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
- b. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and

- covers are used;
  - c. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
  - d. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
  - e. Storage cabinets for flammable products;
  - f. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
  - g. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
  - h. Sampling and Testing
    - i. Vents from continuous emissions monitors and other analyzers;
    - j. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
    - k. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
    - l. Hydraulic and hydrostatic testing equipment;
    - m. Environmental chambers not using HAP gases;
    - n. Soil gas sampling;
    - o. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units;
6. Safety Activities
- a. Fire suppression systems;
  - b. Emergency road flares;
  - c. Miscellaneous Activities
  - d. Shock chambers;
  - e. Humidity chambers;
  - f. Solar simulators;
  - g. Cathodic protection systems;
  - h. High voltage induced corona; and
  - i. Filter.

## 5.0 - APPLICATION ADMINISTRATIVE COMPLETENESS CHECKLIST

REQUIREMENT	MEETS REQUIREMENTS			COMMENT
	YES	NO	N/A	
Has the standard application form been completed?				
Has the responsible official signed the standard application form?				
Has a process description and flow diagram been provided?				
Does the application include an equipment list with the type of equipment, maximum rated capacity, make, model, serial number, date of manufacture, and equipment identification (ID) number?				
Are the facility's maximum capacity to emit with elective limits documented with all appropriate supporting information?				
Does the application include an identification and description of elective controls? (if applicable)				
Does the application include all stack parameter information requested in the Emission Sources Form?				
For any application component claimed as confidential, are the requirements of AR.S. 49-432 and A.A.C. R18-2-305 addressed?				